

Effective Management Training Strategies To Optimize The Performance Of Administrative Staff In The Digital Era

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Abstract

This research investigates the efficacy of management training strategies to enhance the performance of administrative staff in the digital era, using the ADDIE model which encompasses Analysis, Design, Development, Implementation, and Evaluation. The study identifies the growing need for digital competencies among administrative personnel and proposes a systematic framework to address these requirements. By integrating tailored training modules that align with the rapid technological advances, the research aims to optimize operational efficiency and staff engagement. Results indicates that well-designed, customized training significantly improves both efficiency and employee involvement. The findings underscore the importance of adaptive training strategies in equipping staff with the necessary digital skills to thrive in advertising dynamic technological landscape. This research contributes to the ongoing discussion about the critical role of continuous learning and development in the digital transformation of administrative functions..

Keywords : Management Training; ADDIE Models; Digital Competency; Administrative Staff; Continuous Learning.

1. Introduction

Human resources are widely recognized as a strategic asset that determines organizational success and long-term competitiveness. Employees function not only as executors of operational duties but also as drivers of innovation and organizational performance. Effective human resource management is therefore essential to ensure that employees work according to their competencies while achieving job satisfaction. A conducive work environment, recognition of performance, and opportunities for self-development are fundamental in strengthening employee commitment (Ardiansyah Toy & Prihatin, 2025). Without proper management practices, organizations will struggle to achieve their objectives and maintain performance stability

Amidst the acceleration of digital transformation, the contemporary work environment demands rapid adaptation from all sectors, including administrative functions, the operational backbone of most organizations. Administrative staff, responsible for coordinating internal activities, managing information, and communicating organizationally, face unique challenges in integrating digital technologies into their daily work routines (Hijrasil et al., 2023). They must not only master existing digital tools but also continuously update their skills to meet evolving demands. To address these challenges, the ADDIE method, which encompasses Analysis, Design, Development, Implementation, and Evaluation, offers a systematic framework for creating and refining training programs (Zulkarnaini et al., 2022). By adopting this method, organizations can ensure that every aspect of training is tailored to meet staff's specific needs and that training materials can be effectively updated and adapted to technological changes or organizational needs.

Changes in information technology have drastically altered the way organizations operate, with new software and applications constantly being introduced into the workplace. While these

changes open up new opportunities for efficiency and innovation, they also create significant skills gaps that can hinder productivity if not properly addressed (Risnawan, 2019). Administrative staff, in particular, often find themselves on the front lines of these changes, expected to utilize new tools without adequate training, resulting in inefficient use and operational errors. Addressing these skills gaps not only strengthens individual effectiveness but also improves overall organizational performance.

The urgent need for an effective training strategy is highlighted by the rapid pace of technology adoption and innovation in software and management systems. Without relevant skills, administrative staff cannot fully utilize the potential of these tools, reducing operational effectiveness and slowing the organization's response to market changes (Gupta & Madan, 2023). Adequate and timely training, therefore, is crucial to ensuring that administrative staff not only remain relevant but also become catalysts in their organization's digital transformation.

The approach to administrative staff training must be comprehensive and adaptable to changing technological and market conditions. An effective training strategy must account for variations in the technological knowledge base among staff, offering customizable training modules based on specific individual needs (Woelandari & Setyawati, 2019). Furthermore, training must go beyond mastering technical tools to include developing a deeper understanding of how technology can be used strategically to support organizational goals. This requires integration between technical training and broader professional development, ensuring that administrative staff are not only efficient but also proactive in their use of technology.

Addressing these challenges involves implementing advanced learning technologies and pedagogical approaches that emphasize active learning and practical application. E-learning-based training, interactive webinars, and face-to-face workshops can be combined to provide rich and diverse learning experiences that cater to different learning preferences (Woelandari & Setyawati, 2019). Continuous evaluation of training effectiveness will ensure that course materials remain relevant and impactful, with changes implemented as needed to accommodate evolving technologies or changes in organizational structure.

The objective of this research is to develop an effective management training strategy to optimize the performance of administrative staff in the digital era using the ADDIE method. By achieving these objectives, the research is expected to not only address existing skills shortages but also improve overall productivity and operational efficiency, providing sustainable benefits to individuals and organizations in facing the challenges of this dynamic digital era.

This research is expected to provide insights and strategies that organizations can use to strengthen the capacity of their administrative staff, ensuring that they are not only ready to face current challenges but also continue to develop and contribute to long-term success in a dynamic and ever-changing environment.

2. Literature Review

Human Resource Management

Human Resource Management (HRM) is a discipline focused on managing individuals within an organization effectively and efficiently to maximize organizational performance. The primary objective of HRM is to increase productivity by optimizing employee effectiveness through various strategies and practices such as recruitment, selection, development, motivation, and compensation (Mangkunegara, 2021). Human Resource Management (HRM) has undergone significant transformation with the advancement of digital technology. The challenges and needs of modern organizations have driven the HR function to evolve from a traditional administrative approach to a more dynamic and technology-centric strategy (Risnawan, 2019). Digitalization in HRM management has not only transformed recruitment and employee management mechanisms but also optimized talent development and retention strategies. The digital era has provided

opportunities for HR practitioners to use advanced analytical tools, leverage big data, and implement automation systems to make more informed and strategic decisions.

This shift is reflected in Wadill (2018), who discusses how human resource information systems (HRIS), data analytics, and collaboration platforms have facilitated more efficient recruitment processes and more effective performance management. Waddill emphasizes that the application of technology in HR not only improves operational efficiency but also strengthens employee engagement by providing tools for more personalized and responsive professional development.

On the other hand, Meister & Mulcahy (2016) explore how digitalization has opened up new opportunities in recruitment and talent management. They argue that technologies such as artificial intelligence and machine learning have revolutionized the way organizations attract and retain employees. These technologies not only expand the range of talent companies can access but also enable the creation of richer and more engaging employee experiences.

Furthermore, Adam (2017) suggests a radical approach to HR management that places greater emphasis on adaptability and innovation. Adams critiques the rigidity of traditional models and advocates the use of technology to make HR functions more flexible and tailored to individual employee needs. This approach supports the idea that HR must move from being merely an administrative manager to a strategic partner that drives growth and innovation within the organization.

Overall, the literature shows that the evolution of HR management in the digital era is not only focused on the adoption of new technological tools, but also on a paradigm shift in understanding and managing the workforce. Digitalization presents new challenges but also significant opportunities for HR practitioners to be more proactive and strategic in designing an inclusive and dynamic future workplace. Success in this regard depends heavily on HR management's ability to integrate technology ethically and effectively, while maintaining a focus on employee well-being and development.

Digital Competence

Digital competence is widely recognized as a critical skill that enables individuals to access, manage, evaluate, and create information using digital technologies. According to Vuorikari et al. (2022), digital competence encompasses five key areas: information and data literacy, communication and collaboration, digital content creation, security, and problem-solving. This framework aims to help European citizens develop the skills necessary to participate in a digital, knowledge-based society. Nurhayati & Lahagu (2024) emphasize the importance of these competencies in supporting social inclusion and active engagement in education and employment.

In the workplace, digital competency plays a crucial role, not only in improving operational efficiency but also in strengthening an organization's innovative capabilities. According to research conducted by Alwy (2022), digital skills directly contribute to employee productivity and innovative capabilities. In the digital age, employees who are able to integrate new technological solutions into daily work processes tend to be more effective in their jobs. This is especially crucial for administrative staff, whose performance often depends on the efficient and effective management of information through digital tools.

Improving digital competency through education and training is key to preparing a competent workforce. Hidayat et al. (2024) found that well-designed training can help individuals of all ages improve their digital skills, not just limited to basic usage but also to more complex aspects such as online safety and digital ethics. This training should target specific skills gaps and promote a lifelong learning approach, as suggested by Nurchandani et al. (2020), who emphasized the need for training that builds confidence as well as technical skills.

Further research by Elisnawati et al. (2023) shows a positive relationship between digital competence and organizational performance. Organizations whose employees have good digital skills show increased efficiency, better adaptation to technological changes, and increased innovative capacity. In an administrative context, the ability to manage digital tasks proficiently

enables staff to reduce the time spent on manual routines, improve data accuracy, and strengthen cross-departmental collaboration.

Management Training

Management training is a systematic process that aims to improve the skills, knowledge, and managerial competencies of individuals within an organization. According to Armstrong (2006), the main objective of management training is to improve the effectiveness and efficiency of managers and the teams they lead. This training not only focuses on improving technical skills but also involves developing interpersonal and decision-making competencies.

One model often used in management training is the ADDIE model, which includes Analysis, Design, Development, Implementation, and Evaluation. According to Muttaqin & Lestari (2024), each phase in the ADDIE model plays an important role in ensuring that the training provided is relevant and effective in accordance with the needs of the organization. Training usually includes sessions on leadership, conflict management, effective communication, performance appraisal, and change management.

The effectiveness of management training can be measured by improvements in individual and organizational performance. Bonggoibo et al. (2024) developed a training evaluation model that includes four levels: reaction, learning, behavior, and results. This evaluation helps organizations determine the extent to which training has influenced managers' understanding, skills, behavior, and business results. Research by Rosidah et al. (2024) shows that well-designed and effectively implemented training results in significant improvements in employee productivity and engagement.

The use of technology has revolutionized the way management training is delivered. E-learning, webinars, and virtual simulations are some of the methods now being used to increase the flexibility and reach of training. Surachman et al. (2024) show that digital learning technologies can increase access to training resources, reduce costs, and enable continuous, self-paced learning. Research by Doni et al. (2024) supports this, showing that learning technologies can improve training effectiveness by providing a more interactive and engaging environment..

ADDIE

The ADDIE model is a systematic and flexible framework widely used in instructional design and training development. It encompasses five sequential stages: Analysis, Design, Development, Implementation, and Evaluation, which together form the acronym ADDIE (Zulkarnaini et al., 2022). Each stage in the model serves as a step-by-step guide for designing, developing, implementing, and evaluating effective learning interventions.



Figure 1. ADDIE Model

- a. **Analysis:** The analysis phase is the phase of determining the needs and foundation of the training or learning process. During this phase, the instructional designer identifies the problem to be addressed, the audience to be served, and the environment in which the training will be implemented. Analysis also includes identifying learning objectives, understanding stakeholder needs and expectations, and clarifying available resources for learning. This is a critical step because it provides direction and context for all subsequent training or learning activities.
- b. **Design:** In the design phase, detailed plans for the learning project are created. Instructional designers develop a curriculum plan, including course structure, instructional strategies to be used, instructional media, and assessment methods. This phase produces a document, such as a blueprint or storyboard, that outlines the content to be taught and how it will be structured. The design should reflect the results of the needs analysis and align with the established learning objectives.
- c. **Development:** During the development phase, the actual learning materials are created based on the previously designed blueprint or storyboard. This includes content production, such as videos, presentations, documents, and other training materials. Supporting technology, such as a learning management system (LMS), is also prepared, and all materials are tested to ensure they function as intended. This process often involves iteration and refinement based on initial feedback to ensure the quality and effectiveness of the training materials.
- d. **Implementation:** Implementation is the stage where training or learning takes place. During this phase, training materials are delivered to participants. This can take the form of face-to-face training, web-based training, or a combination of both. Facilitators or instructors play a key role in this phase, and technical support may be required to ensure that all aspects of the technology are functioning properly. Close monitoring is conducted to identify any issues or obstacles that may arise during the training.
- e. **Evaluation:** Evaluation is the final stage in the ADDIE model where the effectiveness of a training or learning program is assessed. This evaluation can be formative, which occurs during implementation to inform improvements, or summative, which occurs after the program has been implemented to assess the achievement of overall objectives. Data from the evaluation is used to identify successes and weaknesses of the training program, which can inform improvements or changes in subsequent program iterations.

The ADDIE model, with its iterative and flexible nature, allows for continuous improvement in the instructional design process and adaptation to varying training needs. This makes it one of the most popular and respected methodologies in instructional design and professional training development.

3. Research methods

Based on the study conducted, the researcher chose to use a qualitative approach, a method designed to collect and analyze narrative, non-quantitative data (Sugiyono, 2022). This approach emphasizes in-depth exploration of subjective human experiences and perceptions, as well as the social values and meanings associated with the phenomenon being studied.

4. Results and Discussion

The ADDIE model is a systematic approach involving five main stages: Analysis, Design, Development, Implementation, and Evaluation. This model is highly effective for designing and implementing digital skills training programs tailored to the needs of administrative staff across various industries. The following details the application of each stage in the context of digital skills training.

The analysis phase of the ADDIE model is the initial and most crucial stage in the instructional design process. The primary goal of this phase is to understand existing needs and establish a solid foundation for all future training activities. The following are the key elements of the analysis phase of the ADDIE model:

1) Data Collection

Data collection is a critical step that determines the direction and content of the training being developed. This stage involves several techniques for gathering comprehensive information:

- **Online Survey:** Develop and distribute an online survey designed to assess the current digital skills of administrative staff. This survey could include questions about common software usage, experience with new digital tools, and barriers to using technology at work.
- **In-Person Interviews:** Conduct one-on-one or small group interviews with staff to gain insight into their experiences using technology in their daily work. These interviews can also uncover training needs not apparent from surveys alone.
- **Focus Group Discussions:** Conduct focus group discussions with diverse staff to understand different perspectives and experiences using technology in the workplace. These discussions often yield deep insights into specific and personalized training needs.
- **Observation:** Direct observation of staff performing their tasks can help identify skills gaps they may not be aware of or able to articulate.

2) Needs Analysis

After collecting sufficient data, the next step is to analyze the information to identify specific skill needs:

- **Data Grouping:** Grouping data based on skill categories such as software usage, data security, data analysis, etc. This helps identify areas where training is most needed.
- **Identifying Gaps:** Comparing the skills currently possessed by staff with the skills required to perform their duties effectively. These gaps will be the primary focus in developing the training curriculum.
- **Priority Analysis:** Determining the priority of training needs, considering factors such as the urgency of the need, the number of staff affected, and the potential impact of skills enhancement on the organization's operations.

3) Stakeholder Input

Involving stakeholders is an important step to ensure support and alignment of training with organizational goals:

- **Meeting with Senior Management:** Hold a meeting with senior management to discuss the findings of the needs analysis and gain input regarding the company's strategic objectives. Senior management can provide valuable perspectives on how digital skills training can be integrated into the company's overall strategy.
- **Coordination with IT and HR:** Coordinate with the IT department to understand the technical aspects of the required skills and with HR to ensure that the training plan is in line with human resource development policies and objectives.

4) Identifying Training Objectives

Identifying and setting specific training objectives is key to directing the entire learning process:

- **Long-Term and Short-Term Goals:** Set long-term goals related to overall skill improvement and more focused short-term goals, such as mastering a particular tool or technique.
- **SMART Goals:** Ensure that training objectives are Specific, Measurable, Achievable, Relevant, and Time-bound. This facilitates evaluation of training success.

The analysis phase of the ADDIE model is crucial because it establishes the foundation for all subsequent steps in the training process. By gathering the right data, carefully analyzing needs, engaging stakeholders, and establishing clear objectives, organizations can develop effective training programs that meet the needs of administrative staff in the digital age.

Design

The design phase is the process of developing the framework and implementation strategy that will be used to deliver the training. This includes determining the curriculum structure, learning approach, tools, and scheduling. The following details each component of the design phase:

1) Curriculum and Modules

- Creating a Curriculum Framework: After establishing training needs from the analysis phase, the next step is to develop a curriculum framework that covers all the important topics that need to be addressed. This includes dividing the training material into logical and structured modules, from basic to advanced.
- Module Structure: Each module in the curriculum should be designed to build skills incrementally. For example, an initial module might focus on the basics of computer use and office applications, while a more advanced module might cover advanced data analysis, specialized software, or cybersecurity.
- Integration of Real Cases and Examples: To reinforce learning, the module should include case studies and real-life examples relevant to the daily tasks of administrative staff, allowing them to see the practical application of the skills learned.

2) Learning strategies

- Pedagogical Approach: Determine the pedagogical approach to be used, such as blended learning, which combines elements of face-to-face and online learning, project-based learning that allows participants to apply skills in real projects, or simulations that provide practical learning experiences in a controlled environment.
- Implementation of Learning Technology: Selecting technology that supports these various learning methods, such as an LMS (Learning Management System) platform for blended learning or simulation software for simulation-based sessions.
- Assessment Strategy: Develop assessment methods to measure learners' progress and achievement. These may include quizzes, assignments, presentations, or performance-based assessments designed to test the application of skills in real-world situations.

3) Tools and Resources

- Tool Selection: Selecting the tools and resources to be used in the training, including the necessary software, hardware, and learning materials such as guidebooks, video tutorials, and other interactive materials.
- Integration of Tools into Learning: Ensuring that tools are effectively integrated into the training curriculum to support learning. This could include setting up an e-learning platform, providing access to databases for practice, or setting up a laboratory for hands-on training.
- Technical Support: Providing technical support to address any issues learners may encounter while using learning technology.

4) Training Schedule

- Flexible Scheduling: Develop a training schedule that takes participants' availability into account and accommodates their needs. This may include sessions outside of business hours or on weekends to minimize disruption to their regular duties.
- Training Phases: Define training phases, where each phase includes a number of modules with sufficient time for learning and application of skills.
- Schedule Revision: Allow room for schedule adjustments based on initial feedback and logistical needs during the training implementation phase.

By planning in detail and thoroughly at the design stage, digital skills training can be delivered in a more structured and effective manner, ensuring that all participants get the most from the investment of time and resources that have been made.

Development

The development phase of the ADDIE model involves transforming the previously designed training plan into concrete, ready-to-use training materials. This involves content creation, pilot

testing, and adjustments based on feedback. Here's a detailed exploration of each aspect of the development phase:

1) Content Creation

- **Digital and Print Content:** Develop a variety of training materials tailored to participants' learning needs and preferences. This might include printed manuals, online interactive modules, and presentation slides. For digital materials, it's important to ensure they're accessible across multiple devices and platforms.
- **Educational Videos:** Create instructional videos that explain key concepts and demonstrate step-by-step processes or skills. These videos should be engaging and informative, ideally short enough to keep participants' attention but long enough to adequately cover the material.
- **Assessment:** Design assessment tools to test participants' understanding of the material presented. These assessments can take the form of quizzes, project assignments, or simulations that require participants to apply what they've learned in realistic scenarios.
- **Use of Multimedia:** Integrating multimedia elements such as graphics, animation, and audio to enrich the learning experience and assist in visualizing difficult concepts.

2) Pilot Testing

- **Participant Selection:** Select a small group of staff from the broader target audience to pilot the training materials. This group should have a range of skill levels and backgrounds to obtain representative feedback.
- **Pilot Implementation:** Conduct a pilot training session with this group, observing how they interact with the material and identifying any areas that generate questions or confusion.
- **Collecting and Analyzing Feedback:** Provide a feedback form or hold a Q&A session after the trial to gather participants' opinions on the material. It's important to ask about the clarity of the instructions, the usefulness of the content, and the engagement of the training materials.

3) Finalization of Material

- **Feedback Evaluation:** Assess the feedback received and determine any necessary changes or improvements. This may include changes to the visual design of the materials, adjustments to the pace and flow of the content, or simplification of confusing instructions.
- **Content Revision:** Updating training materials based on feedback. This may involve rewriting unclear sections, adding additional examples to clarify concepts, or updating resources with the latest information.
- **Final Validation:** Once revisions are complete, the training materials should be tested again, if possible, to ensure that all improvements have been successful and the materials are ready for broad rollout.

4) Documentation

- **Change Logging:** Record all changes made during the development process for documentation and easy future reference. This is also useful for ensuring consistency in future training.

The development phase is an intensive phase that requires attention to detail and the ability to adapt based on feedback. The effectiveness of training materials depends heavily on how well this phase is executed, ensuring that the content is not only informative and relevant, but also engaging and easily understood by all participants.

Implementation

The implementation phase of the ADDIE model is about the practical application of all the preparations made in the previous phases. This involves organizing and conducting training

sessions, providing technical support, and ongoing monitoring and adjustments. Details of each aspect of the implementation phase are as follows:

1) Implementer Training

- **Session Scheduling:** Ensuring that all training sessions are scheduled with participant availability and required resources in mind. This includes coordinating with facilitators, providing suitable training space, and ensuring all training materials and supporting technology are ready for use.
- **The Role of the Facilitator:** Facilitators or trainers play a key role in implementing training. They not only deliver content but also manage group interactions and dynamics, ensuring that each participant is actively engaged and acquires knowledge aligned with the training objectives.
- **Participant Engagement:** Implement techniques to increase participant engagement, such as group discussions, Q&A, and hands-on activities. It's important for facilitators to recognize when participants might need additional encouragement or assistance and adjust their teaching approach accordingly.

2) Technical Support

- **IT Support:** Deploy an IT team to provide support during training sessions, particularly for training involving e-learning or other information technology components. This includes troubleshooting technical issues, such as poor internet connections, login issues, or software glitches.
- **Accessibility:** Ensuring that all tools and platforms used during training are accessible to all participants, including providing assistive devices for participants with special needs if necessary.
- **Monitoring and Adjustment**
- **Active Monitoring:** During the training, the facilitator or implementation team should actively monitor how the session is progressing and receive feedback from participants. This monitoring can be through direct observation or through technology that collects data on participant interactions.
- **Training Adjustments:** Based on observations and feedback received, adjustments may be necessary to maximize the effectiveness of the training. These adjustments may include changing the pace of delivery, changing teaching methods, or repeating material that participants appear to have not fully grasped.
- **Ongoing Communication:** Maintaining open lines of communication with participants throughout the training process is crucial. This can be done through email, an LMS platform, or a brief meeting after the session to ensure participants feel supported and that their concerns are addressed.

3) Process Documentation

- **Implementation Records:** Document all aspects of the implementation, including schedule, attendance, participant feedback, and any adjustments made. This documentation is very useful for the evaluation phase and for planning future training.

Effective implementation requires good coordination, adaptability, and effective communication from all parties involved. This stage is the practical manifestation of all previous planning and preparation and is critical to the success of the overall training program.

Evaluation

The evaluation phase is a systematic process for assessing the effectiveness and efficiency of implemented training. This evaluation is essential for identifying successes and areas for improvement, as well as for informing future training development. Further details on the evaluation phase are as follows:

1) Continuous Evaluation

- **Continuous Feedback:** Collect ongoing feedback from participants throughout the training. This can be done through short surveys after each session, a suggestion box, or an online discussion forum. The focus is on gaining insight into what's working and what's not, as well as how participants' learning experiences are.
- **Formative Evaluation:** Monitoring and assessing the learning process in real-time through direct observation and interaction. This involves the facilitator or instructor assessing the effectiveness of the training materials, teaching methods, and participant engagement. This feedback is used to make immediate adjustments if any aspect of the training does not meet expectations.

2) Final Assessment

- **Performance Assessment:** Conducting pre- and post-training performance assessments of participants to measure skill improvement or changes in job performance. This can be done through performance tests, work simulations, or practical assignments that demonstrate the application of learned skills.
- **Satisfaction Survey:** Conduct a satisfaction survey after the training is completed to measure participant satisfaction with various aspects of the training, including content, delivery, facilities, and perceived benefits. This data is critical to measuring participant acceptance of the training.

3) Reports and Recommendations

- **Data Compilation:** Collecting and analyzing all data collected from ongoing evaluations and final assessments. This includes statistical processing and qualitative findings that provide a comprehensive picture of training effectiveness.
- **Develop an Evaluation Report:** Create a detailed evaluation report that includes data analysis, key findings, and conclusions. This report should provide enough information to understand how the training met its initial objectives and where there is room for improvement.
- **Recommendations for Improvement:** Based on the evaluation results, develop recommendations for the next iteration of the training. These recommendations may include suggestions for changing teaching methods, adapting training materials, or implementing additional support strategies for participants.
- **Follow-up:** Determine the necessary follow-up, whether in the form of additional training, refresher sessions, or self-paced learning to ensure long-term retention and effective application of skills.

Evaluation doesn't end with reporting but should be seen as an ongoing cycle of training program development. By incorporating evaluation as an integral part of the training process, organizations can continuously improve the quality and effectiveness of their learning initiatives, thereby providing significant added value to employees and the organization as a whole.

3. Conclusion

This study successfully developed and implemented an effective management training strategy to improve administrative staff performance in the digital era, using the ADDIE method, which includes the stages of Analysis, Design, Development, Implementation, and Evaluation. The results of this study indicate that systematically designed training tailored to employee needs can significantly improve operational efficiency and enhance staff engagement.

Based on these findings, it is recommended that other institutions adopt a similar framework to develop staff competencies across various departments, ensuring all team members are equipped with the digital skills necessary for the future. Furthermore, there is a need to develop more diversified and interactive training content, such as the use of simulations and learning-based games, to enhance the learning experience and strengthen retention. Interdepartmental collaboration also needs to be enhanced in training development to ensure that programs address cross-functional needs and support overall organizational goals.

This study has several limitations that should be considered. First, the limited sample size may not fully reflect success in other environments due to variability in technology adaptation and organizational culture. Second, the relatively short duration of the study may not fully capture the long-term effects of this intervention. Third, because the primary focus was on administrative staff, the results may not be directly applicable to more complex technical or managerial roles without modification.

For future research, longitudinal studies are recommended to assess the long-term impact of training on staff performance and adaptability to new technologies. Future research should also explore the development of personalized training that allows for adaptation based on individual needs and learning preferences to enhance training effectiveness. Furthermore, integrating emerging technologies such as AI and VR into training can increase interactivity and immersion, potentially improving overall learning outcomes.

4. Bibliography

- Agung, A. A. G. (2025). Statistika Dasar untuk Pendidikan. *Jurnal QOSIM Jurnal Pendidikan Sosial & Humaniora*, 2, 780–789.
<https://ejournal.yayasanpendidikandzurriyatulquran.id/index.php/qosim/article/view/1070>.
- Adam, L. (2017). *HR Disrupted: It's Time for Something Different*. Northwich: Practical Inspiration Publishing.
- Alwy, M. A. (2022). Manajemen Sumber Daya Manusia di Era Digital melalui Lensa Manajer Sumber Daya Manusia Generasi Berikutnya. *SIBATIK JOURNAL: Jurnal Ilmiah Bidang Sosial, Ekonomi, Budaya, Teknologi, dan Pendidikan*, 1(10), 2265–2276.
- Armstrong, M. (2006). *Strategic Human Resource Management: A Guide to Action*. London: Kogan Page.
- Bonggoibo, K., Herin, T. L., & Suharsono, D. S. (2024). Pengaruh Tingkat Pendidikan dan Pelatihan Kerja terhadap Efektivitas Kerja Pegawai Badan Meteorologi Klimatologi dan Geofisika Kabupaten Manokwari. *Jurnal Mirai Management*, 9(2), 183–191.
- Doni, A. W., Thaariq, N. A. A., Ponda, A., & Bahar, I. (2024). Efektivitas Pelatihan Pengembangan Media Pembelajaran. *Jurnal Teknologi Pembelajaran Indonesia*, 14(1), 30–39.
- Elisnawati, Mas'ud, M., & Selong, A. (2023). Pengaruh Kompetensi Digital, Motivasi Kerja dan Disiplin Kerja terhadap Kinerja Pegawai pada Badan Pengembangan Sumber Daya Manusia (BPSDM) Provinsi Sulawesi Selatan. *Journal on Education*, 5(3), 8308–8323.
- Ghodang, H., & Ghodang, F. (2023). *Kepemimpinan Virtual*. Bogor: Halaman Moeka Publishing.

- Gupta, R., & Madan, S. (2023). *Digital Marketing: The Science and Magic of Digital Marketing Can Help You Become a Successful Marketing Professional*. London: BPB Online.
- Hidayat, N., Paccagnnetae, N., & Paramithaswari, D. (2024). Peningkatan Keterampilan Keamanan Digital pada Siswa SMK Ananda Bekasi di Era Disrupsi Digital. *Jurnal Pengabdian Masyarakat Waradin*, 4(3), 234–242.
- Hijrasil, Maisharah, S., Widodo, Z. D., Darsono, & Manuhutu, H. (2023). Penerapan Teknologi HRIS (Human Resource Information System) dalam Meningkatkan Efisiensi dan Efektivitas Manajemen SDM. *Jurnal Pendidikan Tambusai*, 7(2), 7074–7085.
- Mangkunegara, A. P. (2021). *Manajemen Sumber Daya Manusia Perusahaan* (1 ed., Vol. 14). Bandung: PT. Remaja Rosda Karya.
- Meister, J. C., & Mulcahy, K. (2016). *The Future Workplace Experience: 10 Rules For Mastering Disruption in Recruiting and Engaging Employees*. New York: McGraw Hill.
- Muttaqin, N., & Lestari, J. D. K. (2024). Membangun Wawasan Keselamatan dan Kesehatan Kerja di Institusi Pendidikan Tinggi: Pengembangan Small Private Online Course (SPOC) untuk Staff Administrasi. *Prosiding Seminar Nasional Sains dan Teknologi Terapan*, 1–13.
- Nurcandrani, P. S., Asriandhini, B., & Turistiati, A. T. (2020). Pelatihan Public Speaking untuk Membangun Kepercayaan Diri dan Keterampilan Berbicara pada Anak-Anak di Sanggar Ar-Rosyid Purwokerto. *Abdi Moestopo: Jurnal Pengabdian Pada Masyarakat*, 3(1), 27–32.
- Nurhayati, S., & Lahagu, S. E. (2024). *Pendidikan Sepanjang Hayat*. Jambi: Sonpedia Publishing Indonesia.
- Risnawan, W. (2019). Manajemen Strategik Birokrasi dalam Era “Disruption.” *Dinamika: Jurnal Ilmiah Ilmu Administrasi Negara*, 5(4), 56–65.
<https://doi.org/10.25157/dinamika.v5i4.1748>
- Rosidah, S. N., Hayati, N. R., Alifi, M. N., & Mahardika, F. M. (2024). Membangun Program Pelatihan Yang Efektik Untuk Meningkatkan Kinerja Karyawan. *Gudang Jurnal Multidisiplin Ilmu*, 2(10), 135–140.
- Sugiyono. (2022). *Metode Penelitian Kuantitatif, Kualitatif dan R & D*. Bandung: Alfabeta.
- Surachman, A., Putri, D. E., & Nugroho, A. (2024). Transformasi Pendidikan di Era Digital Tantangan dan Peluang. *Journal of International Multidisciplinary Research*, 2(2), 52–63.
- Vuorikari, R., Stefano, K., & Yves, P. (2022). *DigComp 2.2: The Digital Competence Framework for Citizens - With New Examples of Knowledge, Skills and Attitudes*. Brussels: Publications Office of the European Union. <https://doi.org/10.2760/115376>
- Wadill, D. (2018). *Digital HR: A Guide to Technology-Enabled Human Resources*. Virginia: Society For Human Resource Management.
- Woelandari, D. S., & Setyawati, N. W. (2019). Sosialisasi dan Pelatihan Pemasaran Berbasis Digital Dengan Menggunakan Media Sosial Facebook dan Instagram Bagi Industri Rumahan di RT 005/Rw 001, Kel. Marga Mulya, Kec. Bekasi Utara, Kota Bekasi. *Prosiding Seminar Nasional SANTIKA*, 62–67.
- Zulkarnaini, Megawati, C., Astini, D., & Syahputra, I. (2022). Penggunaan Model ADDIE dalam Pengembangan Bahan Ajar. *BAKTIMAS: Jurnal Pengabdian pada Masyarakat*, 4(2), 77–80.